

# 10046076 ULTRASONIC WELDING APPARATUS...ROTATION SENSOR

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L101	50	(US-5658408-\$ or US-5435863-\$ or US-6590201-\$ or US-5594434-\$ or US-5858142-\$ or US-5080736-\$ or US-4468265-\$ or US-5497080-\$ or US-6002249-\$ or US-6547903-\$ or US-5772814-\$ or US-4631685-\$ or US-6600151-\$ or US-6600150-\$ or US-6563108-\$ or US-6552330-\$ or US-6545262-\$ or US-6486802-\$ or US-6414304-\$ or US-6411376-\$ or US-6399941-\$ or US-6380536-\$ or US-6342697-\$ or US-6289294-\$ or US-6285024-\$ or US-6268601-\$).did. or (US-6104023-\$ or US-5983720-\$ or US-5900930-\$ or US-5828060-\$ or US-5729007-\$ or US-5729006-\$ or US-5557101-\$ or US-5319196-\$ or US-5214278-\$ or US-5059901-\$ or US-5058822-\$ or US-5006703-\$ or US-4894533-\$ or US-4806751-\$ or US-4757196-\$ or US-4728788-\$).did. or (US-20010025920-\$ or US-20030052261-\$).did. or (CN-1370110-\$ or WO-200114124-\$ or JP-2001058355-\$).did. or (JP-2001135063-\$ or WO-200114124-\$ or US-20020092994-\$ or WO-200006973-\$ or US-5796098-\$ or US-5497080-\$).did.	USPAT; US-PGPUB; EPO; DERWENT	2/27/04 8:34	Previously tagged...
BRS	L102	2	(( ( spindle or rotor ) and ( anvil or cradle or chuck ))) and L101	USPAT; US-PGPUB	2/27/04 13:13	browsed again...
BRS	L103	26	(( ROTA\$4 near3 SENS\$3 ) or ( ROTA\$4 near3 detect\$3 )) and L101	USPAT; US-PGPUB	2/27/04 8:36	browsed again...

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Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L1	524	ULTRASONIC with encod\$4	USPAT	2/27/04 13:19	
BRS	L2	5953	ULTRASONIC and encod\$4	USPAT	2/27/04 13:09	see below...
BRS	L3	240	ULTRASONIC with encod\$4 and optic\$2	USPAT	2/27/04 13:10	
BRS	L4	54	ULTRASONIC with encod\$4 with optic\$2	USPAT	2/27/04 13:10	browse these... see below...
BRS	L5	11469	( spindle or rotor ) and ( anvil or cradle or chuck )	USPAT; US-PGPUB	2/27/04 13:14	
BRS	L6	52	2 and 5	USPAT; US-PGPUB	2/27/04 13:26	see below...
BRS	L7	1	4 and 5	USPAT; US-PGPUB	2/27/04 13:14	na
BRS	L8	2316	((250/231.\$).CCLS.)	USPAT	2/27/04 13:18	
BRS	L9	34	ULTRASONIC and 8	USPAT	2/27/04 13:23	these... see below...
BRS	L10	12	2 and 8	USPAT	2/27/04 13:23	na
BRS	L11	51	6 not 7 not 10	USPAT; US-PGPUB	2/27/04 13:31	na
BRS	L12	52	4 not 6 not 7 not 10	USPAT; US-PGPUB	2/27/04 13:33	na
BRS	L13	22	9 not 4 not 6 not 7 not 10	USPAT; US-PGPUB	2/27/04 13:33	na
BRS	L14	0	(3 and 5) not 9 not 4 not 6 not 7 not 10	USPAT; US-PGPUB	2/27/04 13:41	
BRS	L15	5	3 and 5	USPAT; US-PGPUB	2/27/04 13:41	na

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Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L1	26070	((thermosonic with BOND\$3 ) OR (thermosonic with WELD\$3 ) OR (thermosonic with ADHER\$3 ) ) or ((SUPERsonic with BOND\$3 ) OR ( SUPERsonic with WELD\$3 ) OR ( SUPERsonic with ADHER\$3 ) ) or ((ULTRASONIC adj3 horn) or (ULTRASONIC adj3 BOND\$3) or (ULTRASONIC with WELD\$3) or SPIN\$1WELDING or RESISTANCE\$1WELDING)	USPAT; US-PGPUB	2/25/04 14:35	See below...
BRS	L2	70748	( ROTA\$4 near3 SENS\$3 ) or ( ROTA\$4 near3 detect\$3 )	USPAT; US-PGPUB	2/25/04 14:38	
BRS	L3	366	1 and 2	USPAT; US-PGPUB	2/25/04 14:43	see below...
IS&R	L4	83612	("156").CLAS.	USPAT; US-PGPUB	2/25/04 14:39	
BRS	L5	19	1 and 2 and 4	USPAT; US-PGPUB	2/25/04 14:43	browsed...
BRS	L6	347	1 and 2 not 4	USPAT; US-PGPUB	2/25/04 14:43	browsed PRESENT back through PY=1999

# 10046076 ULTRASONIC WELDING APPARATUS...ROTATION SENSOR

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L52	70850	( ROTA\$4 near3 SENS\$3 ) or ( ROTA\$4 near3 detect\$3 )	USPAT; US-PGPUB	2/26/04 15:14	
BRS	L53	26127	((thermosonic with BOND\$3 ) OR (thermosonic with WELD\$3 ) OR (thermosonic with ADHER\$3 ) ) or ((SUPERsonic with BOND\$3 ) OR ( SUPERsonic with WELD\$3 ) OR ( SUPERsonic with ADHER\$3 ) ) or ((ULTRASONIC adj3 horn) or (ULTRASONIC adj3 BOND\$3) or (ULTRASONIC with WELD\$3) or SPIN\$1WELDING or RESISTANCE\$1WELDING)	USPAT; US-PGPUB	2/26/04 15:17	
BRS	L54	718	156/580.2	USPAT; US-PGPUB	2/26/04 15:20	
BRS	L55	2083	156/73.1	USPAT; US-PGPUB	2/26/04 15:20	
BRS	L56	925	156/580.1	USPAT; US-PGPUB	2/26/04 15:20	
BRS	L57	956	156/362 156/363	USPAT; US-PGPUB	2/26/04 15:20	
IS&R	L58	336	(156/580.2).CCLS.	USPAT; US-PGPUB	2/26/04 15:21	
IS&R	L59	1015	(156/73.1).CCLS.	USPAT; US-PGPUB	2/26/04 15:20	
IS&R	L60	458	(156/580.1).CCLS.	USPAT; US-PGPUB	2/26/04 15:20	
IS&R	L61	514	((156/362) or (156/363)).CCLS.	USPAT; US-PGPUB	2/26/04 15:20	
BRS	L62	6	52 and 58	USPAT; US-PGPUB	2/26/04 15:40	browsed...NA
BRS	L63	4	52 and 59	USPAT; US-PGPUB	2/26/04 15:25	browsed...NA
BRS	L64	5	52 and 60	USPAT; US-PGPUB	2/26/04 15:26	browsed...NA
BRS	L67	54	52 and 61 not (62 or 63 or 64)	USPAT; US-PGPUB	2/26/04 15:28	shows no duplicates...
BRS	L65	54	52 and 61	USPAT; US-PGPUB	2/26/04 15:36	browsed...
BRS	L68	11469	(( spindle or rotor ) and ( anvil or cradle or chuck ))	USPAT; US-PGPUB	2/26/04 15:36	
BRS	L70	17	68 and 59	USPAT; US-PGPUB	2/26/04 15:43	
BRS	L71	10	68 and 60	USPAT; US-PGPUB	2/26/04 15:40	
BRS	L72	10	68 and 61	USPAT; US-PGPUB	2/26/04 15:40	
BRS	L69	4	68 and 58	USPAT; US-PGPUB	2/26/04 15:41	na
BRS	L73	16	68 and 59 not 58 not 52	USPAT; US-PGPUB	2/26/04 15:47	na
BRS	L74	5	68 and 60 not 59 not 58 not 52	USPAT; US-PGPUB	2/26/04 15:48	na
BRS	L75	9	68 and 61 not 60 not 59 not 58 not 52	USPAT; US-PGPUB	2/26/04 15:49	na
IS&R	L76	817	((219/617) or (219/616) or (219/612) or (219/635) or (219/647)).CCLS.	USPAT; US-PGPUB	2/26/04 15:52	Class 219 subclasses searched in Divisional...
BRS	L77	2	76 and 68	USPAT; US-PGPUB	2/26/04 15:53	na
BRS	L78	5	76 and 52	USPAT; US-PGPUB	2/26/04 15:54	na
BRS	L79	5	76 and 53	USPAT; US-PGPUB	2/26/04 15:54	na
IS&R	L80	1	("4149288").PN.	USPAT; US-PGPUB	2/26/04 15:58	cited in PTO892 of DIVISIONAL application 10/689,916

# 10046076 ULTRASONIC WELDING APPARATUS...ROTATION SENSOR

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	x	3	((156/84).CCLS.) and (( OPTICAL adj3 SENS\$3 ) and ( ROTATION near3 SENS\$3 ))	USPAT	2/25/04 10:37	Found 2 good ones previously to print for Rotation Sensing, refreshed... none new...
IS&R		955	(156/84).CCLS.	USPAT	2/25/04 10:37	
BRS		12582	ULTRASONIC with WELDING	USPAT	2/25/04 10:37	
BRS		2575	( OPTICAL adj3 SENS\$3 ) and ( ROTATION near3 SENS\$3 )	USPAT	2/25/04 10:38	
BRS	x	30	((156/84).CCLS.) and (ULTRASONIC with WELDING)	USPAT	2/25/04 10:41	browsed previously, refreshed...
BRS	x	17	((156/84).CCLS.) and ( ROTATION near3 SENS\$3 )	USPAT	2/25/04 10:42	browsed... refreshed...
BRS	x	1	10/046,076	USPAT; US-PGPUB	2/25/04 10:45	This APPLICATION
IS&R	L53	612	(250/231.13).CCLS.	USPAT; US-PGPUB	2/25/04 12:52	
IS&R	L54	491	(250/231.14).CCLS.	USPAT; US-PGPUB	2/25/04 12:52	
BRS	L59	12	54 and @pd>20030807	USPAT; US-PGPUB	2/25/04 12:55	updated
BRS	L58	45	53 and @pd>20030807	USPAT; US-PGPUB	2/25/04 12:57	updated

BRS	L60	26070	((thermosonic with BOND\$3 ) OR (thermosonic with WELD\$3 ) OR (thermosonic with ADHER\$3 ) ) or ((SUPERsonic with BOND\$3 ) OR ( SUPERsonic with WELD\$3 ) OR ( SUPERsonic with ADHER\$3 ) ) or ((ULTRASONIC adj3 horn) or (ULTRASONIC adj3 BOND\$3) or (ULTRASONIC with WELD\$3) or SPIN\$1WELDING or RESISTANCE\$1WELDING)	USPAT; US-PGPUB	2/25/04 13:02	See below...
BRS	L61	50	(US-5080736-\$ or US-4468265-\$ or US-5658408-\$ or US-5435863-\$ or US-6547903-\$ or US-5772814-\$ or US-4631685-\$ or US-5858142-\$ or US-6590201-\$ or US-6600151-\$ or US-6600150-\$ or US-6563108-\$ or US-6552330-\$ or US-6545262-\$ or US-6486802-\$ or US-6414304-\$ or US-6411376-\$ or US-6399941-\$ or US-6380536-\$ or US-6342697-\$ or US-6285024-\$ or US-6289294-\$ or US-6268801-\$ or US-6104023-\$ or US-5900930-\$ or US-5983720-\$).did. or (US-5828060-\$ or US-5729007-\$ or US-5729006-\$ or US-5594434-\$ or US-5557101-\$ or US-5319196-\$ or US-5214278-\$ or US-5059901-\$ or US-5058822-\$ or US-5006703-\$ or US-4894533-\$ or US-4806751-\$ or US-4757196-\$ or US-4728788-\$ or US-5497080-\$ or US-6002249-\$).did. or (US-20030052261-\$ or US-20010025920-\$).did. or (WO-200114124-\$ or CN-1370110-\$ or JP-2001058355-\$).did. or (JP-2001135063-\$ or WO-200114124-\$ or US-20020092994-\$ or WO-200006973-\$ or US-5796098-\$ or US-5497080-\$).did.	USPAT; US-PGPUB; EPO; DERWENT	2/25/04 13:01	previously tagged...
BRS	L62	6	60 and 61	USPAT; US-PGPUB	2/25/04 13:02	browsed....

IS&R	L63	2448	((324/125) or (341/13) or (341/14) or (156/84) or (356/138)).CCLS.	USPAT; US-PGPUB	2/25/04 13:09	
BRS	L64	1154	(G01D005/34)[IPC]	USPAT; US-PGPUB	2/25/04 13:10	
BRS	L65	3114	( OPTICAL adj3 SENS\$3 ) and ( ROTATION near3 SENS\$3 )	USPAT; US-PGPUB	2/25/04 13:12	
BRS	L66	70	60 and 63	USPAT; US-PGPUB	2/25/04 13:16	
BRS	L69	11685	(rotary adj horn) or (rotary adj anvil) or (( spindle or rotor ) and ( anvil or cradle or chuck ))	USPAT; US-PGPUB	2/25/04 13:16	
BRS	L70	281	60 and 69	USPAT; US-PGPUB	2/25/04 13:24	
BRS	L71	0	60 and 69 and 53	USPAT; US-PGPUB	2/25/04 13:17	
BRS	L72	0	60 and 69 and 54	USPAT; US-PGPUB	2/25/04 13:17	
BRS	L74	0	60 and 69 and 64	USPAT; US-PGPUB	2/25/04 13:17	
BRS	L75	2	60 and 69 and 65	USPAT; US-PGPUB	2/25/04 13:18	finds this application and DIVISIONAL... PGPUbs
BRS	L73	7	60 and 69 and 63	USPAT; US-PGPUB	2/25/04 13:19	browsed...
BRS	L67	3	60 and 64	USPAT; US-PGPUB	2/25/04 13:21	na
BRS	L68	23	60 and 65	USPAT; US-PGPUB	2/25/04 13:22	no
BRS	L76	272	60 and 69 not 63 not 64 not 65 not 61	USPAT; US-PGPUB	2/25/04 13:26	removed dups...
BRS	L77	38730	( ROTAT\$3 near3 SENS\$3 )	USPAT; US-PGPUB	2/25/04 13:30	
BRS	L78	0	77 and 76	USPAT; US-PGPUB	2/25/04 13:30	
BRS	L79	6353	( ROTARY near3 SENS\$3 )	USPAT; US-PGPUB	2/25/04 13:30	
BRS	L80	9	79 and 76	USPAT; US-PGPUB	2/25/04 13:31	NA

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Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L81	101	((G01D005/34)[IPC]) AND (( ROTAT\$5 near3 SENS\$3 ))	DERWENT	2/25/04 13:34	
BRS	L82	7519	((SUPERsonic with BOND\$3 ) OR ( SUPERsonic with WELD\$3 ) OR ( SUPERsonic with ADHER\$3 ) ) or ((ULTRASONIC adj3 horn) or (ULTRASONIC adj3 BOND\$3) or (ULTRASONIC with WELD\$3) or	DERWENT	2/25/04 13:35	
BRS	L83	1	81 AND 82	DERWENT	2/25/04 13:35	ABSTRACT FOR THIS APPLICATION...
BRS	L84	86	((G01D005/34)[IPC]) AND (( ROTAT\$3 near3 SENS\$3 ))	DERWENT	2/25/04 13:39	NONE NEW... BROWSED, FINDS US 5497080

Type	Hits	Search Text	DBs	Time Stamp	Comments
BRS	2	1999JP-0318463.ap.prai. or 1999JP-0233932.ap.prai.	DERWENT	4/12/03 18:35	
BRS	1	2001-307903.NRAN.	DERWENT	4/12/03 18:35	
BRS	1	2001-307903.NRAN.	DERWENT	4/12/03 18:36	

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
IS&R	L1 <sup>2*</sup>	910	(156/64).CCLS.	USPAT	4/16/03 15:02	
BRS	L2 <sup>3*</sup>	11671	ULTRASONIC with WELDING	USPAT	4/16/03 15:56	
BRS	L3 <sup>4*</sup>	2403	( OPTICAL adj3 SENS\$3 ) and ( ROTATION near3 SENS\$3 )	USPAT	4/16/03 15:14	
BRS	L4	52197	( OPTICAL adj3 SENS\$3 ) or ( ROTATION near3 SENS\$3 )	USPAT	4/16/03 15:45	
BRS	L5 <sup>1*</sup>	3	1 and 3	USPAT	4/16/03 15:21	Found 2 good ones to print for Rotation Sensing
BRS	L7	5	1 and 2 and 4 not 5	USPAT	4/16/03 15:34	browsed...
BRS	L8	23	1 and 2 not 4 not 5	USPAT	4/16/03 15:34	
BRS	L9	28	1 and 2 not 5	USPAT	4/16/03 15:35	
BRS	L6 <sup>5*</sup>	28	1 and 2	USPAT	4/16/03 15:35	browsed -- print 2...
BRS	L10 <sup>6*</sup>	16	1 and ( ROTATION near3 SENS\$3 )	USPAT	4/16/03 15:55	browsed...
IS&R	L11	2013	(250/214R).CCLS.	USPAT	4/16/03 15:55	
BRS	L12	8	11 and ( ROTATION near3 SENS\$3 )	USPAT	4/16/03 15:56	
BRS	L13	0	11 and 2	USPAT	4/16/03 15:58	
BRS	L14	20097	((ULTRASONIC with BOND\$3 ) OR (ULTRASONIC with WELD\$3 ) OR (ULTRASONIC with ADHER\$3 ) )	USPAT	4/16/03 15:59	
BRS	L15	1	11 and 14	USPAT	4/16/03 16:00	NA
BRS	L16 <sup>7*</sup>	823	((thermosonic with BOND\$3 ) OR (thermosonic with WELD\$3 ) OR (thermosonic with ADHER\$3 ) )	USPAT	4/16/03 16:00	
BRS	L17 <sup>8*</sup>	547	((SUPERsonic with BOND\$3 ) OR ( SUPERsonic with WELD\$3 ) OR ( SUPERsonic with ADHER\$3 ) )	USPAT	4/16/03 16:00	
BRS	L19	0	11 and 17	USPAT	4/16/03 16:01	
BRS	L20	1	1 and 17	USPAT	4/16/03 16:01	NA
BRS	L21	3	1 and 16	USPAT	4/16/03 16:01	NA, NONE NEW
BRS	L18	1	11 and 16	USPAT	4/16/03 16:03	NA, NONE NEW

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L43	★ 1	10/046,076	USPAT; US-PGPUB	8/7/03 13:44	THIS APPLICATION
BRS	L44	18566	escap\$3 near air	USPAT; US-PGPUB	8/7/03 13:45	
BRS	L45	1	43 and 44	USPAT; US-PGPUB	8/7/03 13:45	highlights meaning of "air escaping"
IS&R	L46	★ 567	(250/231.13).CCLS.	USPAT; US-PGPUB	8/7/03 14:22	browsed all (Classified Search)
BRS	L47	(2) 2	09/741172	USPAT; US-PGPUB	8/7/03 14:23	this application (2)

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
BRS	L1	1	10/046,076 and (escap\$3 near air) and depression	US-PGPUB	8/8/03 8:52	checking text, depression is not a thru-hole.

Type	L#	Hits	Search Text	DBs	Time Stamp	Comments
IS&R	L1	★ (522) 2	999 (156/64).CCLS.	USPAT; US-PGPUB	8/8/03 9:23	
IS&R	L2	★ 18 603	((341/13) or (341/14)).CCLS.	USPAT; US-PGPUB	8/8/03 9:25	
IS&R	L3	★ 14 542	(356/138).CCLS.	USPAT; US-PGPUB	8/8/03 9:25	
BRS	L4	0	1 and 2	USPAT; US-PGPUB	8/8/03 9:25	
BRS	L5	0	1 and 3	USPAT; US-PGPUB	8/8/03 9:26	
BRS	L6	1	2 and 3	USPAT; US-PGPUB	8/8/03 9:26	save for consideration in future?
BRS	L7	36553	( ROTAT\$3 near3 SENS\$3 )	USPAT; US-PGPUB	8/8/03 9:33	
BRS	L8	35	1 and 7	USPAT; US-PGPUB	8/8/03 9:33	browsed, none new... eg. Tulley (US 5858142 A)
BRS	L9	★ 20 1098	(G01D005/34)[IPC]	USPAT; US-PGPUB	8/8/03 9:47	
BRS	L10	182	9 and 7	USPAT; US-PGPUB	8/8/03 9:44	
BRS	L11	★ 21 17	9 and 7 AND (1 OR 2 OR 3)	USPAT; US-PGPUB	8/8/03 9:44	Browsed... <input type="checkbox"/>
BRS	L12	★ 22 1635	(G01D005/34)[IPC]	DERWENT	8/8/03 9:47	
BRS	L13	★ 23 15184	( ROTAT\$3 near3 SENS\$3 )	DERWENT	8/8/03 9:48	
BRS	L14	★ 24 85	12 AND 13	DERWENT	8/8/03 9:48	BROWSED, FINDS US 5497080
BRS	FAMILY	1	1996-150836.NRAN.	DERWENT	8/8/03 10:01	
IS&R	L16	1	("5497080").PN.	USPAT; US-PGPUB	8/8/03 10:10	
IS&R	L17	★ 12 479	(250/231.14).CCLS.	USPAT; US-PGPUB	8/8/03 10:16	SEE BELOW...
IS&R	L18	★ 11 567	(250/231.13).CCLS.	USPAT; US-PGPUB	8/8/03 10:16	
BRS	L19	424	17 not 18	USPAT; US-PGPUB	8/8/03 10:38	BROWSED PRESENT TO 19821116...
BRS	L20	40453	( ROTAT\$3 near3 SENS\$3 ) or ( ROTARY NEAR3 SENS\$3 )	USPAT; US-PGPUB	8/8/03 10:35	
BRS	L21	133	19 AND @PD<19821116	USPAT; US-PGPUB	8/8/03 10:39	REMAINING PATENTS....
BRS	L22	16	20 AND 21	USPAT; US-PGPUB	8/8/03 10:39	BROWSED, NA